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September 21, 2004

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**By Hand**

Ms. Mary L. Cottrell  
Secretary  
Department of Telecommunications & Energy  
One South Station  
Boston, MA 02110

Re: D.T.E. 03-128  
Petition of New England Power Company

Dear Ms. Cottrell:

On behalf of USGen New England, Inc. ("USGenNE"), I enclose for filing in the above-referenced docket one original and one copy of the Reply Brief of USGen New England, Inc.

Kindly date stamp the enclosed copy of this letter and return same to our messenger.

Thank you for your attention to this matter.

Sincerely,

Mary Beth Gentleman

MBG:jrd  
Enclosures

cc: Selma Urman, Hearing Officer (6 copies)  
Deidre Matthews, Director, Siting Division (1 copy)  
William Febiger, Technical Director, Siting Division (1 copy)  
Jolette Westbrook, General Counsel, Siting Board (1 copy)  
Amy Barad, Analyst, Siting Division (1 copy)  
Louis M. Arak, Project Manager (1 copy)  
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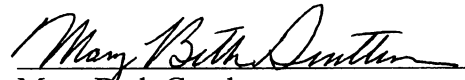
**COMMONWEALTH OF MASSACHUSETTS  
DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY**

**D.T.E. 03-128**

**CERTIFICATE OF SERVICE**

I hereby certify that I have this day served the foregoing documents upon all persons below in accordance with the requirements of 220 C.M.R. § 1.05 and the procedural rules in this docket.

Dated at Boston this 21<sup>st</sup> day of September, 2004.



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**COMMONWEALTH OF MASSACHUSETTS**

**DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY**

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**D.T.E. 03-128**

**Petition of New England Power Company  
Pursuant to Mass. Gen. L. c. 40A, § 3 for  
Exemption from the Zoning Ordinance  
of the City of Salem**

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**REPLY BRIEF OF USGEN NEW ENGLAND, INC.**

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**Boston, Massachusetts  
September 21, 2004**

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**COMMONWEALTH OF MASSACHUSETTS  
DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY**

Petition of New England Power Company  
Pursuant to Mass. Gen. L. c. 40A, § 3  
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D.T.E. 03-128

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## **I. INTRODUCTION**

The Initial Brief of New England Power Company (“NEP”) was essentially a reformatted version of its original Petition. NEP failed to address the central issues of this case including, but not limited to, the clear implications of its revised loadflow analyses filed after the close of hearings, the absence of any alternatives analysis based on its revised “need” case, the conflict between the construction schedule proposed and the outage scheduling process of Operating Procedure (“OP”) 5, and the reliability implications of the Transient Switching Study. To the extent that NEP briefs these issues for the first time in its Reply Brief, potentially depriving USGen New England, Inc. (“USGenNE”) of an opportunity to reply to its arguments, USGenNE will seek leave of the Department of Telecommunications and Energy (“DTE” or “Department”) to file a sur-reply.

## **II. ARGUMENT**

### **A. NEP Has Not Met Its Burden of Demonstrating that the Proposed Project is Reasonably Necessary for the Public Convenience or Welfare**

#### **1. NEP Persists in Relying on Outdated and Therefore Erroneous Loadflow Data**

In the few pages of its Initial Brief that NEP devoted to the issue of “need,” NEP relied almost exclusively on its initial Petition (Exh. NEP 1) and exhibits attached thereto rather than on the corrected “need” case submitted after the close of hearings (Exh. USGenNE-RR-1, Att. A, 3-4; Exh. USGenNE-RR-2). For example, NEP cites to the exhibits of Mr. Martin which assumed only one transformer was being installed at Ward Hill. NEP Initial Brief at 12, citing NEP-JWM at 4, Line 31-5, Lines 1-21. NEP’s Initial Brief also relies on stale information request responses and testimony that are based solely on the outdated planning assumptions for Ward Hill. NEP Initial Brief at 11 citing DTE 1-5, DTE 1-6, DTE 1-8 NEP, Tr. 11-19. This is NEP’s basis for its contention that “the studies of the North Shore area revealed system voltages

would be less than the stated criteria without the Project.” NEP Reply at 11-12. NEP’s updated analyses demonstrate quite the opposite. USGenNE Initial Brief at 11-13. NEP confirmed that under the revised analysis, “the Ward Hill upgrades eliminated King Street’s voltage problems.” Exh. USGenNE-RR-2 (Supp.) The Department cannot rely on an admittedly outdated analysis for a finding that the proposed capacitor bank is reasonably necessary for the public convenience or welfare. *See* USGenNE Initial Brief at 5-16.

2. NEP Agrees that Voltage Requirements Are Within a Range

As USGenNE demonstrated in its Initial Brief, OP-12’s voltage requirements establish a range of acceptable voltage levels, not a mandatory single voltage level. USGenNE Initial Brief at 13-14. Apparently NEP agrees. In its Initial Brief, NEP describes the capacitor bank’s purpose as “providing the needed reactive support and *thereby assuring voltage within a reasonable range*” (emphasis supplied). NEP Initial Brief at 10. NEP goes on to observe as follows:

The established *normal operating range* for voltages of 115 kV and below is no less than 0.90 p.u. (DTE 1-7; Tr. 12, Line 21). The analogous NEPOOL criterion is contained within NEPOOL OP-12. (Tr.16, Line 4–18, Line 22; USGenNE 1-10) (emphasis supplied)

*Id.* at 11. Thus, USGenNE and NEP are in agreement that there is no single voltage level that must be maintained; the criteria determining need in this case is a range of voltage levels, not a single number. NEP has also demonstrated in its loadflow analyses that that criteria can be maintained, even if the voltage at Salem Harbor switchyard is below the 119 kV level. First, NEP’s own initial proposal in this case, which assumed only one transformer at Ward Hill and a 126 MVAR capacitor bank at Salem Harbor, showed voltage levels at Salem Harbor under “all lines in conditions” of slightly below 119 kV (Exh. DTE 1-8(b); USGenNE Initial Brief at 9), yet the King Street bus 54, which constituted the “worst case” achieved a p.u. voltage rating above

the 0.90 minimum. *Id.* More importantly, NEP’s loadflow results using the corrected upgrade assumptions for 2007 show that a voltage level of 119 kV at the Salem Harbor switchyard is not necessary to maintain compliance with NEP’s Transmission Guide Planning criterion of 0.90. NEP modeled the system assuming three new transformers at Ward Hill, no units operating at Salem Harbor, and no new capacitor bank:

**2007: WITH UPGRADES; NO CAPACITOR BANK AT SALEM HARBOR; NO UNITS OPERATING AT SALEM HARBOR**

2007 - no Salem capacitors	King St 54		King St 55		Salem Harbor	
Scenario	Voltage (p.u.)	Voltage (kV)	Voltage (p.u.)	Voltage (kV)	Voltage (p.u.)	Voltage (kV)
All Lines In	.994	114.3	.985	113.3	1.004	115.5
Contingency 1 (Twks 38-94S+151)	.977	112.4	.967	111.2	.994	114.3
Contingency 2 (WH C-155+151)	.916	105.3	N/A	N/A	.990	113.9
Contingency 3(WH G-133+151)	.993	114.2	.983	113.0	1.003	115.3

Exh. USGenNE-RR-2; USGenNE Initial Brief at 12.

Under these assumptions, the voltage level at Salem Harbor switchyard is at 115.5 kV under “all lines in conditions”.<sup>1</sup> Under all of the contingency cases presented by NEP, including the worst case at King Street, the voltage levels were maintained above the 0.90 p.u. voltage level required by NEP’s Transmission Planning Guide (Exh. DTE 1-7, Att. A at C-7). Therefore, NEP’s own loadflow studies demonstrate that the planning criteria of OP-12 for the Salem Harbor switchyard and NEP’s Transmission Planning Guide can be maintained with the Ward Hill upgrades only. The expanded Ward Hill upgrades have obviously changed the calculus of what is needed at Salem Harbor switchyard to maintain adequate voltage levels on the system. NEP’s loadflow analyses have demonstrated unequivocally that the capacitor bank is not needed to keep “voltage within a reasonable range” even with no Salem Harbor units operating.<sup>2</sup>

<sup>1</sup> The 115.5 kV level is above the mid-point of the 109 to 121 voltage range for Salem Harbor. Exh. DTE 1.

<sup>2</sup> Salem Harbor Station provides other benefits, however. The Department has previously found that, in light of the ISO New England’s finding that Salem Harbor is necessary to ensure the reliability of the New England electric

**B. NEP's Commitments to Minimize Impacts Are Vague, Unsubstantiated and Unenforceable as Proposed**

1. The Site Rules Must Be the Same for NEP and USGenNE's Projects

Because NEP has only an easement, rather than a fee interest in the land on which it is proposing to build the capacitor bank and ancillary equipment, its management of the construction process has implications, both legal and practical, for the fee owner, USGenNE.<sup>3</sup> The Salem Zoning Code provides that zoning violations are presumed to be of both "the occupant of the premises as well as that of the owner or with such owner's consent." *New England Power Company*, D.T.E. 03-128, USGenNE Petition for Leave to Intervene, January 27, 2004, at 2-3. In this particular circumstance, it is possible that a significant construction project will be undertaken contemporaneously at the Salem Harbor site. That project has specific requirements to which it must adhere for the duration of the project. Exh. Salem 1-30, Att. B. It is not reasonable to assume that the general public would be able to differentiate between impacts caused by the capacitor bank project versus USGenNE's Emission Control Plan ("ECP"). It is not reasonable to assume that if trucks are queued outside the gates of Salem Harbor, the public will accept a Site Plan Approval condition violation because the trucks are associated with NEP's project, not USGenNE's project. If NEP begins construction before 8:00 a.m. or continues after 5:00 p.m., as Mr. Fougere testified it might (Tr. 250, lines 5-

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grid, USGenNE's operation of Salem Harbor "provides a service with significant public benefits." *USGen New England, Inc.*, D.T.E. 03-83, June 22, 2004 at fn. 8.

<sup>3</sup> USGenNE is particularly concerned that NEP is not planning to seek all necessary permits and approvals for the project. For example, NEP indicated that "the project which is the subject of this proceeding does not require a building permit." Exh. DTE-RR-3. That language was then deleted in NEP's Exh. DTE-RR-3 (Supp.). However, it reappeared in Exh. Salem 1-55 (Supp.) and in its Initial Brief at 8-9. The construction of a structure on USGenNE's property without a building permit raises a number of significant legal issues, which are outside the scope of this proceeding but which could impact the project schedule. Similarly, the record in this case suggests that in terms of review under the Massachusetts Environmental Policy Act, the Ward Hill upgrades and the proposed capacitor bank project have been segmented, in violation of 310 C.M.R. 11.01(2)(c); Exh. USGen NE-1; Tr. 25, lines 20-24; Tr. 225, lines 19-24; Tr. 226, line 1; Tr. 227, lines 4-11.



24; Tr. 252, lines 13-20), the general public will not be able to discern if the construction noise or traffic emanated from NEP's or USGenNE's project. Consequently, if the Department chooses to substitute its judgment for that of the Salem Planning Board and grants a comprehensive exemption from the Site Plan Approval process, at a minimum, the same site rules must apply to both projects to avoid chaos on the site and misplaced enforcement actions.

## 2. NEP's Commitments are Vague and Unsubstantiated

In its Initial Brief, NEP claims that it has "committed to avoid off-site queuing of trucks." NEP Reply at 19. However, NEP has offered no evidence of how it will do so such as conditioning delivery orders. The record offers nothing more than bald assertions without any implementation specifics.

NEP also states that it "anticipates adequate parking for the Project will be available, as has been the case with other construction projects at the site. (DTE 1-18; Tr. 162, Lines 17-19)" NEP Brief at 17. NEP also declares that "[a]dequate loading or lay-down facilities for the entirety of construction will be within the existing confines of Salem Harbor Generating Station. (DTE 1-18; Tr. 159, Line 9-161, Line 24)." *Id.* These claims are wholly unsupported. The material cited is either irrelevant or nothing more than assertions with no evidence to support the claim. The proposed capacitor bank would be built on land which NEP admits is "presently used by USGenNE as a parking lot." NEP Initial Brief at 3. In addition, the switchyard fence must be expanded for the proposed new fifth bay (*id.*), further shrinking the on-site parking area. Given that NEP's project will displace current parking areas, there will be even less space for parking than is currently available during normal operations, much less during the construction of the ECP. As NEP noted repeatedly in Exh. USGenNE-RR-5, USGenNE's ECP Project involves a significant additional work force and very large trucks and equipment components. *See also* Tr. 244, lines 8-10. NEP makes no reference to having met with USGenNE to ascertain when or if

there would be adequate parking, unloading and lay-down space available on USGenNE's land for NEP before, during or after the ECP Project. Therefore, as of the close of the record in this proceeding, NEP had no reasonable basis for making representations to the Department that there will be adequate parking, unloading and lay-down space "within the existing confines of Salem Harbor Generating Station." NEP will not even commit to using a different gate to minimize impacts on Salem Harbor's neighbors during the construction period ("NEP is planning to use the main gate at Fort Avenue" (Exh. USGenNE-RR-5 at 2)). Consequently, the Department cannot rely upon NEP's unsubstantiated representations to find that NEP is minimizing project impacts on the community.

3. NEP Has Made No Commitment to Minimize Impacts on the Operation of Salem Harbor Station

Nowhere in NEP's Initial Brief is there a commitment to minimize impacts on the operation of Salem Harbor Station. NEP's Initial Brief is utterly silent on the recommendations of the Transient Switching Study. Exh. USGenNE-RR-8, Att. B. The silence is also deafening on the two- to four-week outage issue. Exh. NEP-RR-2; Tr. 253, lines 11-20. Claims that "NEP is willing to work closely with USGenNE to coordinate this work" (*id.*) are not supported by the record in this case. *See* USGenNE Initial Brief at 18-20. Given the absence of need for the proposed project, and its potential adverse and unmitigated impacts on another public service corporation, USGenNE in its capacity as operator of Salem Harbor, the proposed project has not satisfied the statutory requirements for an exemption under G.L. c. 40A, § 3.

**III. CONCLUSION**

Based on the evidentiary record in this case, and for all of the reasons set forth above and in its Initial Brief, USGenNE requests that the Department find that NEP has not met its burden

of demonstrating that the proposed capacitor bank is reasonably necessary for the convenience or welfare of the public.

If, however, the Department inexplicably finds on this record that the proposed project is reasonably necessary for the convenience or welfare of the public, USGenNE requests that the grant of a zoning exemption be conditioned on the following:

- (1) NEP's installation of all of the protective devices assumed and recommended in the Transient Switching Study (Exh. USGenNE-RR-8);
- (2) NEP's implementation of the same conditions imposed on USGenNE in the City of Salem's Site Plan approval (Exh. Salem 1-30, Att. B);
- (3) NEP's completion of the necessary tie-in with respect to Unit 4 during a scheduled outage approved for Salem Harbor's Unit 4;
- (4) NEP's commitment to review all aspects and impacts of the capacitor bank design and construction to ensure consistency of plans with USGenNE; and
- (5) NEP's receipt of all necessary permits and approvals for the proposed project.

Respectfully submitted,

**USGen New England, Inc.**

By their attorneys,



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